



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,413	06/15/2001	Shuo-Yen Robert Li	Li 19	8415
570	7590	03/21/2006	EXAMINER	
AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103			PHAN, MAN U	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 09/882,413	Applicant(s) LI, SHUO-YEN ROBERT	
	Examiner Man Phan	Art Unit 2665	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 09 January 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: 10 and 11.
- Claim(s) objected to: 5 and 8.
- Claim(s) rejected: 4 and 9.
- Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See attached sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____.

Advisory Action

1. The affidavit, exhibit or request for reconsideration has been considered but does not place the application in condition for allowance because:

Applicant's arguments are not persuasive. In response to applicant's argument that the combination of Lee (US#6,335,930) and Yang et al. (US#5,940,389) fails to present a prima facie case of obviousness. In response, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). It is not necessary that a "prima facie" case of unpatentability exist as to the claim in order for "a substantial new question of patentability" to be present as to the claim. Thus, "a substantial new question of patentability" as to a patent claim could be present even if the examiner would not necessarily reject the claim as either fully anticipated by, or obvious in view of, the prior art patents or printed publications. As to the importance of the difference between "a substantial new question of patentability" and a "prima facie" case of unpatentability see generally *In re Etter*, 756 F.2d 852, 857 n.5, 225 USPQ 1, 4 n.5 (Fed. Cir. 1985). Also, See MPEP § 2141.01(a) for a discussion of analogous and nonanalogous art in the context of establishing a prima facie case of obviousness under 35 U.S.C. 103. See MPEP § 2131.05 for a discussion of analogous and nonanalogous art in the context of 35 U.S.C. 102. 904.02. It's the examiner's position that the reference is applied herein for the teaching of a novel method and system for a multi-stage interconnection network having several switching stages. Lee

Art Unit: 2665

(US#6,335,930) discloses in Fig. 6 a block circuit diagram illustrated the structure of a multi-stage (NXN) interconnection network which has N input ports and N output ports, for transmitting packets from the input ports to the output ports (*multicast switching*). Lee shows in Fig. 5 an example of the MxM basic switching element, in which M is 3. The switching element 500 has three input ports 501-1, 501-2 and 501-3, and three output ports 502-1, 502-2 and 502-3 (*multicast system*). The output ports 502-1, 502-2 and 502-3 are also labeled with the numerals '0', '1' and '2'. The two output ports which are labeled '0' and '1', namely the routing ports 502-1 and 502-3, are connected in a perfect shuffle configuration to the next stage. The other output port, which is labelled '2' and is the bypassing port 502-2, is connected to the bypassing port of the switching element in the corresponding position of the next stage (Col. 8, lines 25 plus and Col. 5, lines 61 plus). Furthermore, Yang et al. (US#5,940,389) discloses in Fig. 8 illustrated a conventional switch with Benes networks for performing multicast routing, in which the Benes network comprising comprising an input stage and an output stage (*multicasting*) (Col. 6, lines 6 plus). It's noted that, in a *multicast system*, each input cell specifies one or more outputs, instead of a single output, as is the case in a *unicast system*. Furthermore, a multicast concentrator is a switch serving for the combined objective of concentration and multicasting, and in some references in the background art, there is notion of an "*mxn concentrator*", which means an "*mxn switch*". There exist many ways to construct an m-to-n concentrator/sorter. Algorithms for the construction of an m-to-n concentrator/sorter by multi-stage interconnection of sorting cells include, as representative of the art, the so-called "knockout tournaments" technique as disclosed by Y. S. Yeh, M. G. Hluchy, and A. S. Acampora, "The Knockout Switch: A Simple Modular Architecture for High Performance Packet Switching," IEEE J.

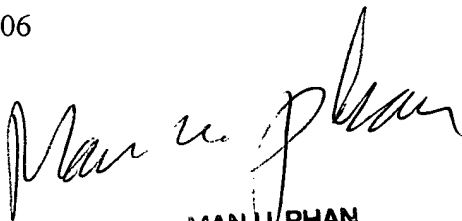
Art Unit: 2665

Select. Areas Commun., vol. 5, pp. 1274-1283, 1987. In a reference entitled "Concentrators in ATM switching," Comp. Sys. Sci. Eng., vol. 6, pp. 335-342, 1996, authored in S. -Y. R. Li and C. -M. Lau (Li-Lau), the authors devised and discussed a special m-to-n concentrator, where $m=2n$, as constructed from two $n \times n$ sorters and n sorting cells.

Examiner maintains that the references cited and applied in the last office actions for the rejection of the claims 7-12 are maintained in this office action. The final rejection mailed on October 04, 2004 is therefore maintained.

Mphan.

03/17/2006


MAN U. PHAN
PRIMARY EXAMINER